



IFW
JH

PATENT
ATTORNEY DOCKET NO. 50304/113001

Certificate of Mailing: Date of Deposit: April 09, 2007

I hereby certify under 37 C.F.R. § 1.8(a) that this correspondence is being deposited with the United States Postal Service as **first class mail** with sufficient postage on the date indicated above and is addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Megan Kiley

Printed name of person mailing correspondence

Megan Kiley

Signature of person mailing correspondence

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: WAER et al.

Confirmation No.: 3050

Serial No.: 10/595,126

Art Unit: 1626

§371 Date: 2/27/2006

Examiner: S. Young

Customer No.: 21559

Title: IMMUNOSUPPRESSIVE EFFECTS OF PTERIDINE DERIVATIVES

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the enclosed Form PTO-1449, copies of which are enclosed, with the exception of U.S. patents and U.S. patent application publications. Included in the list are a communication from a foreign patent office in a counterpart application and copies of communications from a corresponding international application.

Submission of this statement is not a representation that a search has been made,

nor is the inclusion of information in this statement an admission that the information is material to patentability.

This statement is being filed after a first Office action on the merits, but before the mailing of a final Office action or a Notice of Allowance. A check for \$180.00 in payment of the late submission fee set forth in 37 C.F.R. § 1.17(p) is enclosed.

If there are any other charges or any credits, please apply them to Deposit Account No. 03-2095.

Date:

Clark & Elbing LLP
101 Federal Street
Boston, MA 02110
Telephone: 617-428-0200
Facsimile: 617-428-7045

Respectfully submitted,

James D. DeCamp, Ph.D.
Reg. No. 43,580

J. Cooper McDonald, Ph.D.
Reg. No. 52,011



Sheet 1 of 7

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No. 50304/113001
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Serial No. 10/595,126
		Applicant WAER et al.
		Filing Date February 27, 2006
		Group 1626
		IDS Filed April 6, 2007
(37 C.F.R. § 1.98(b))		

U.S. PATENT DOCUMENTS						
Examiner's Initials	Document Number	Publication/ Issue Date	Patentee or Applicant	Class	Subclass	Filing Date (If Appropriate)
	2003/236255	12-25-2003	Waer et al.			
	2,512,572	06-20-1950	Smith, Jr. et al.			
	2,581,889	01-08-1952	Timmis			
	2,665,275	01-05-1954	Campbell et al.			
	2,667,486	01-26-1954	Cain			
	2,740,784	04-03-1956	Sletzinger et al.			
	2,940,972	06-14-1960	Roch			
	3,071,587	01-01-1963	Curran			
	3,081,230	03-12-1963	Weinstock et al.			
	3,159,628	12-01-1964	Pachter et al.			
	3,475,425	10-1969	Roch, Joseph			
	3,859,287	01-07-1975	Parish et al.			
	5,047,405	09-10-1991	Gennari			
	5,665,772	09-09-1997	Cottens et al.			
	5,780,462	07-14-1998	Lee et al.			
	5,843,943	12-1-1998	Carson et al.			
	5,929,046	07-27-1999	McMurry et al.			
	5,992,713	11-30-1999	Manabat			
	6,331,547	12-18-2001	Zhu et al.			
	6,440,991	08-27-2002	Zhu et al.			
	6,844,343	01-2005	Pfleiderer et al.			

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No. Serial No. Applicant Filing Date Group IDS Filed	50304/113001 10/595,126 WAER et al. February 27, 2006 1626 April 6, 2007
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)			
(37 C.F.R. § 1.98(b))			

	3,122,546	02-25-1964	Osdene			
	5,300,509	04-05-1994	Block et al.			
	5,500,428	03-19-1996	Block et al.			
	6,043,228	03-28-2000	McMurray et al.			
	2004/0102447	05-27-2004	Bonnert et al.			
	2005/0054653	03-10-2005	Eisenbrand et al.			
	2004/0077859	04-22-2004	Waer et al.			
	2006/0189620	8-24-2006	Waer et al.			
	2007/0043000	2-22-2007	Waer et al.			
	2006/0287314	12-21-2006	Waer et al.			
	2007/0004721	01-04-2007	Waer et al.			
	2007/0032477	02-08-2007	Waer et al.			
	6,946,465	09-20-2005	Waer et al.			
	5,641,783	06-24-1997	Klein et al.			
	3,162,635	12-1964	Schroeder			

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION						
Examiner's Initials	Document Number	Publication or Issue Date	Country or Patent Office	Class	Subclass	Translation (Yes/No)
	CH 231,852	07-17-1944	Switzerland			
	DD 267 495	05-03-1989	Germany East			
	DE 19 21 308	01-07-1971	Germany			
	DE 40 09 941	10-02-1991	Germany			
	EP 0 108 890	05-23-1984	EPO			

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No. Serial No. Applicant Filing Date Group IDS Filed	50304/113001 10/595,126 WAER et al. February 27, 2006 1626 April 6, 2007
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)			
(37 C.F.R. § 1.98(b))			

	EP 0 134 922	03-27-1985	EPO			
	EP 0 185 259	06-25-1986	EPO			
	EP 0 290 819	11-17-1988	EPO			
	EP 0 362 645	4-11-1990	EPO			
	EP 0 956 855	11-17-1999	EPO			
	EP 1 479 682	11-24-2004	EPO			
	EP 0 544 445	11-19-1992	EPO			
	EP 0 574 906	12-22-1993	EPO			
	GB 2 405 793	03-2005	United Kingdom			
	GB 677,342	08-13-1952	United Kingdom			
	GB 763,044	12-05-1956	United Kingdom			
	GB 785,353	10-30-1957	United Kingdom			
	WO 00/39129	07-06-2000	WIPO			
	WO 00/45800	08-10-2000	WIPO			
	WO 01/19825	03-22-2001	WIPO			
	WO 01/21619	03-29-2001	WIPO			
	WO 02/32507	04-25-2002	WIPO			
	WO 03/062240	07-31-2003	WIPO			
	WO 05/025574	03-24-2005	WIPO			
	WO 94/11001	05-26-1994	WIPO			
	WO 94/06431	03-31-1994	WIPO			
	WO 95/31987	11-30-1995	WIPO			
	WO 95/32203	11-30-1995	WIPO			
	WO 98/04558	02-5-1998	WIPO			

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No. Serial No. Applicant Filing Date Group IDS Filed	50304/113001 10/595,126 WAER et al. February 27, 2006 1626 April 6, 2007
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)			
(37 C.F.R. § 1.98(b))			

	WO 98/08516	03-5-1998	WIPO			
	WO 98/52948	11-26-1998	WIPO			
	WO 04/104005	12-02-2004	WIPO			
	WO 05/021003	03-10-2005	WIPO			
	WO 05/039587	05-06-2005	WIPO			

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)

	Baba et al., "Synergistic Antiviral Effects of Antiherpes Compounds and Human Leukocyte Interferon on Varicella-Zoster Virus in Vitro," <i>Antimicrob. Agents Chemother.</i> 25:515-517 (1984).
	Beers and Berkow, "The Merck Manual of Diagnosis and Therapy 17 th Edition," 1474-1476 (1999), XP-002313611.
	Beers and Berkow, "The Merck Manual of Diagnosis and Therapy 17 th Edition," 953-954 (1999), XP-002313612.
	Beilstein search, XP-002324247.
	Beilstein Database, <i>Beilstein Institute For Organic Chemistry</i> 28:1015-1020 (1992), XP-002296933.
	Beilstein Database, <i>Beilstein Institute For Organic Chemistry</i> 90:2631 (1957) XP-002296934.
	Beilstein Database, <i>Beilstein Institute For Organic Chemistry</i> 93:2668 (1960) XP-002296935.
	Beilstein Database, <i>Beilstein Institute For Organic Chemistry</i> 52:1403-1410 (2003) XP-002296936.
	Beilstein Database, <i>Beilstein Institute For Organic Chemistry</i> 41:7811-788 (1995) XP-002296937.
	Beilstein Database, <i>Beilstein Institute For Organic Chemistry</i> 48:1255-1274 (1998) XP-002296938.
	Black et al., "Agents that Block TNF- α Synthesis or Activity," <i>Ann Rep. Med. Chem.</i> 32:241-250 (1997).

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No. 50304/113001
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Serial No. 10/595,126
		Applicant WAER et al.
		Filing Date February 27, 2006
		Group 1626
		IDS Filed April 6, 2007
(37 C.F.R. § 1.98(b))		

	Boon, "Pteridines. Part IV.* Derivatives of 2,4-Diaminopteridine and Related Compounds," <i>J. Chem. Soc.</i> 2146-2158 (1957).
	Cairo, "Immunology Lecture #20 Transplantation," <i>Columbia University, [online]</i> (2003).
	Chantry "Emerging Drugs," 1:5-13 (1999).
	Chou and Talalay, "Quantitative Analysis of Dose-Effect Relationships: The Combined Effects of Multiple Drugs or Enzyme Inhibitors," <i>Adv. Enzyme Regul.</i> 22:27-55 (1984).
	Cottam et al., "Substituted Xanthines, Pteridinediones and Related Compounds as Potential Anti-Inflammatory Agents. Synthesis and Biological Evaluation of Inhibitors of Tumor Necrosis Factor .alpha.," <i>J. Med. Chem.</i> 39:2-9 (1996).
	Elion et al., "Antagonists of Nucleic Acid Derivatives. VII. Synergism in Combinations of Biochemically Related Antimetabolites," <i>J. Biol. Chem.</i> 208:477-488 (1954).
	Elliott et al., "Synthesis of N-10-Methyl-4-Thiofolic Acid and Related Compounds," <i>Journal of Medicinal Chemistry</i> 18:492-496 (1975).
	Froehlich et al., "Inhibition of Neuronal Nitric Oxide Synthase by 4-Amino Pteridine Derivatives: Structure-Activity Relationship of Antagonists of (6R)-5, 6, 7, 8-Tetrahydrobiopterin Cofactor," <i>Journal of Medicinal Chemistry</i> 48:4108-4121 (1999).
	Giori et al., "Reactivity of 3H-Pyrimido[5, 4-c] [1, 2, 5] Oxadiazin-3-One Towards Carbanions: Synthesis of Pteridine-2, 4-Diones," <i>J. Heterocyclic Chemistry</i> 23:1661-1665 (1986).
	Illei and Lipsky, "Novel, on-Antigen-Specific Therapeutic Approaches to Autoimmune/Inflammatory Diseases," <i>Current Opinion in Immunology</i> 12:712-718 (2000).
	Israel et al., "Pyrimidine Derivatives. VII. Some Condensed Derivatives of 2, 4, 5-Triamino-6-Methylthiopyrimidine," <i>Journal of Pharmaceutical Sciences</i> 54:1626-1632 (____).
	Kaldrikyan, M.A. et al., "Pteridine Derivatives. I. Synthesis of Some Substituted 6,7-Diarylpteroxides," <i>Armenian Khimicheskii Zhurnal</i> 29:337-341 (1976).
	Landauer and Rydon, "A Convenient Synthesis of Some 4-Substituted 5-Aminopyrimidines," <i>J. Chem. Soc.</i> 3721-3722 (1953).
	Landry, "Pharmacologie. Descibles vers l'indication Therapeutique," <i>Cours et Exercice</i> :177 (2003); XP-002313503.
	Lin et al., "Use of the Methylxanthine Derivative A802715 in Transplantation Immunology, I. Strong in Vitro Inhibitory Effects on CD28-Costimulated T Cell Activities," <i>Transplantation</i> 63:1813-1819 (1997).
	Lin et al., "Use of the Methylxanthine Derivative A802715 in Transplantation Immunology, II. In Vivo Experiments," <i>Transplantation</i> 63:1734-1738 (1997).
EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No. 50304/113001
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Serial No. 10/595,126
		Applicant WAER et al.
		Filing Date February 27, 2006
		Group 1626
		IDS Filed April 6, 2007
(37 C.F.R. § 1.98(b))		

	Matter et al. "Structural Requirements for Inhibition of the Neuronal Nitric Oxide Synthase (NOS-I): 3D-QSAR Analysis of 4-Oxo- and 4-Amino-Pteridine-Based Inhibitors," <i>J. Med. Chem.</i> 45:2923-2941 (2002).
	Merz et al., "Synthesis of 7-Benzylamino-6-chloro-2-piperazino-4-pyrrolidinopteridine and Novel Derivatives Free of Positional Isomers. Potent Inhibitors of cAMP-Specific Phosphodiesterase and of Malignant Tumor Cell Growth," <i>J. Med. Chem.</i> 41:4733-4743 (1998).
	Mohr et al., "Pteridines: Synthesis and Properties of 6-Thioxanthopterin and 7-Thioisoxanthopterin," <i>Helv. Chim. Acta</i> 75:2317-2326 (1992).
	Moreb and Zucali, "The Therapeutic Potential of Interleukin-1 and Tumor Necrosis Factor on Hematopoietic Stem Cells," <i>Leuk. Lymph.</i> 8:267-275 (1992).
	Murata et al., "A Facile Method for Regioselective 6,7-Disubstitution of Pteridine," <i>Heterocycles</i> 53:1259-1262 (2000).
	Nicolaus, B.J.R., "Symbiotic Approach to Drug Design", <i>Decision Making in Drug Research</i> , 173-186 (1983).
	Pfleiderer and Lohrmann, "Pteridine, XII: Synthese von 2-Amino-4-Alkoxy-Pteridinen," <i>Chem. Ber.</i> 94:12-18 (1961).
	Sato and Fukuya, "Studies on Pyrazines. Part 37. ¹ Synthesis of 6-Propionylpteridine-2,4 (1H,3H)-dione and its 1-and/or 3-Methyl Derivatives from Marine Natural Products," <i>J. Chem. Soc., Perkin Trans. 1</i> :89-95 (2000).
	Spickett et al., "The Synthesis of Compounds With Potential Anti-Folic Acid Activity. Part I. 7-Amino- And 7-Hydroxy-Pteridines," <i>Journal of The chemical Society, Chemical Society. Letchworth</i> 2887-2891 (1954).
	Weinstock et al., "Pteridines. XII. Structure-Activity Relationships of Some Pteridine Diuretics," <i>J. Med. Chem.</i> 11:573-579 (1968).
	West, "Solid State Chemistry and its Applications," <i>Wiley</i> 358 & 365 (1988).
	Yao and Pfleiderer, "Pteridines. Protection of Pteridines", <i>Helvetica Chimica Acta</i> , 86:1-12 (2003).
	Neilsen et al., "Unequivocal syntheses of 6-methyl- and 6-phenylisoxanthopterin" <i>J. Heterocyclic Chem.</i> , 24, pages 1621-1628 (1987)
	Taghavi-Moghadam et al., "A new, general, and regioselective method for the synthesis of 2, 6-disubstituted 4-aminopteridines", <i>Tetrahedron Lett.</i> , 38 (39), pages 6835-6836 (1997)
	Jackson et al., "6, 7-disubstituted 2, 4-diaminopteridines: novel inhibitors of <i>Pneumocystis carinii</i> and <i>Toxoplasma gondii</i> dihydrofolate reductase", <i>Antimicrobial Agents and Chemotherapy</i> , 40 (6), pages 1371-1375 (1996)
	Magnus et al. "Neural stem cells in inflammatory CNS diseases: mechanisms and therapy" <i>J. Cell. Mol. Med.</i> 2005, 9:303-319.
	Obach "Drug-drug interactions: an important negative attribute in drugs" <i>Drugs of Today</i> 2003, 39:301-338.

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No. Serial No. Applicant Filing Date Group IDS Filed	50304/113001 10/595,126 WAER et al. February 27, 2006 1626 April 6, 2007
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)			
(37 C.F.R. § 1.98(b))			

	Cecil Textbook of Medicine, 20 th edition (1996), vol. 2, pp:2050-2057.
	Cecil Textbook of Medicine, 20 th edition (1996), vol. 2, pp:1992-1996.
	"FDA mulls drug to slow late-stage Alzheimer's" cnn.com 9/24/2003.
	Wikipedia entries for Antihistamine, Autoimmunity, List of autoimmune diseases, Lupus erythematosus, and Sjogren's syndrome, printed from http://en.wikipedia.org on December 28, 2006.
	Buu-Hoi et al., "Phthalonimides (1,3,4-Trioxo-1,2,3,4-tetrahydroisoquinolines) of Potential Biological Interest," J. Heretocycl. Chem., 1968, 5:545-546.
	Ganellin "Final Report on the Activities of the Medicinal Chemistry Section" [online] 14 January 2002 [retrieved on 2004-06-02] < www.iupac.org/divisions/VII/VII.M/VIIM-ReportDec2001.pdf >
	Abou-Hadeed et al. Pteridines (1996), 7(4) 113-122.
	Sugimoto et al. Pteridines (1997), 8(3), 188-194
	Vinot Bulletin de la Societe Chimique France (1983), (9-10), Pt. 2, 2752-5.
	International Search Report, PCT/BE04/000124
	International Preliminary Report on Patentability, PCT/BE04/000124
	International Written Opinion, PCT/BE04/000124
	European Communication, EP 04761485.4

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	